

Active Reading

Section: Mutation and Genetic Change

Read the passage below. Then answer the questions that follow.

Multicellular eukaryotes have two major cell types: germ cells and somatic cells. *Germ cells* make up the gametes, whereas *somatic cells* make up the rest of the body. Mutations can occur in either type of cell. However, if a mutation occurs in a somatic cell, that genetic change will not affect the person's future offspring. For example, a mutation in a person's lung cell could cause the cell to grow into lung cancer. Yet, the mutated genes in the cancer cells will not be transferred to the person's children.

Only a mutation in a germ cell may be passed on to the next generation. However, any such mutation may be silent and have little effect. Only rarely do mutations cause significant changes in future generations.

SKILL: READING EFFECTIVELY

Read each question, and write your answer in the space provided.

1. How does the prefix *multi* apply to a multicellular organism?

2. How are germ cells and somatic cells related?

3. What happens if a mutation occurs in a skin cell?

Active Reading *continued*

4. What information does the second sentence in the second paragraph tell the reader?

An analogy is a comparison. In the space provided, write the letter of the term that best completes the analogy.

- _____ 5. A somatic mutation is to the body as a germ mutation is to the
- a. cell.
 - b. gametes.
 - c. genetic code.
 - d. body.